

6. This application contains claims directed to the following patentably distinct Restriction Subgroups of the claimed invention. These subgroups are independent and distinct because each polymorphic site and each molecule containing said polymorphic site is structurally and functionally distinct from each other polymorphic site and molecules containing said site. The chemical structure of each polymorphism and of each molecule containing the same differ from each other. For example, a polynucleotide comprising PS1 is chemically, structurally, and functionally different from a molecule comprising PS3. Further, with particular respect to the haplotype and genotyping claims, it is noted that the haplotypes and genotypes encompassed by these claims are also distinct from each other and from the single polymorphisms recited. For example, a molecule of haplotype 1, comprising a particular combination of polymorphisms, differs chemically, structurally, and functionally from a molecule of haplotype 2 and from a molecule comprising a single polymorphism (e.g., PS1).

7. In order to be perfectly clear, the following subgroups within the particular Groups are NOT species elections. These are independent and distinct for the reasons given above.

binding, more or less to the nucleic acid sequence of SEQ ID NO: 2 or the nucleic acid sequence of SEQ ID NO: 1 or a Zmax1 nucleic acid comprising a polymorphism of Table 4, except for the C/A base change at location 2119 (308G), is the candidate molecule.